

Amendments to the Specification:

Please replace the paragraph beginning at page 8, line 1, with the following amended paragraph:

In FIG. 2, a wage record having a value "W" is associated with a period of time 216 of the timeline 202. At a given time at which the employee receives a raise in pay, the wage record [[102]] is updated by, for example, a Human Resources (HR) administrator, and a new period of time 218 is defined in which the wage record has an increased value indicated by "W+1." In the following discussion, a period of time associated with a specific time line may be referred to as a "slot," so that the timeline 202 includes slots 216 and 218. In this way, a period may coincide with multiple slots on multiple timelines.

Please replace the paragraph beginning at page 9, line 5, with the following amended paragraph:

The timeline 206 illustrates time constraint 2. That is, a slot 224 represents the bonus record [[106]] having a value "B," while a slot 226 represents the bonus record [[106]] having the value "B+1." A gap 228 exists between the slots 224 and 226, indicating that the bonus record need not exist at any given point in time. That is, if the employee is not eligible for a bonus, or if the enterprise rescinds its bonus policy, then the bonus record may not exist at a given point in time.

Please replace the paragraph beginning at page 10, line 1, with the following amended paragraph:

Similarly, upon a change in value L1 of the time slot 232 to a value "location = L2" associated with a time slot [[238]]240 (as well as a corresponding change in value BA1 of the time slot 234 to a value "Bank Account = BA2" associated with a time slot [[240]]242), a new Infotype is defined that is associated with a period 244.

Please replace the paragraph beginning at page 11, line 18, with the following amended paragraph:

FIG. 4 is a block diagram of a grouping reader 402. In FIG. 4, the grouping reader 402 includes a grouping editor 404 that inputs an Infotype 406 associated with a particular assignment. The grouping editor 404 then determines a corresponding grouping reason 408, and outputs a grouping value 410. This process may be repeated for all Infotypes of all assignments, to the extent necessary to ensure all appropriate grouping values have been calculated.

Please replace the paragraph beginning at page 16, line 7, with the following amended paragraph:

In FIG. 9, records 922 and 924 exhibit a first type of inconsistency, where grouping values (A) of each record match, but the content (illustrated as “1” and “4” respectively) of the records do not match. A record 926 exhibits another inconsistency type, where the grouping value (A) is correct for a portion of the record, but a split is missing in the record 926 that would correspond to the split between grouping periods 912 and 914 of the timeline 904. Additionally, the content (“2”) is not reflected in a corresponding record ~~[[9328]]~~928 of the grouping period 912, as it should be given that the grouping values of periods 908 and 912 are the same (A).

Please replace the paragraph beginning at page 16, line 20, with the following amended paragraph:

Finally, records 936 and 938 are inconsistent, even though they have the same grouping value (“A”) and the same content (“6”). This is because the records 936 and 938 do not match the actual grouping value (“B”) assigned to their respective grouping periods 916 and ~~[[938]]~~920.

Please replace the paragraph beginning at page 18, line 10, with following amended paragraph:

FIG. 11 is a flowchart 1100 illustrating the process of reading grouping values during the re-grouping operation of FIG. 10. In FIG. 11, an Infotype (subtype) of the selected assignment is selected for processing (1102). A time constraint associated with the Infotype is computed (1104), and admissibility of grouping is checked accordingly (1106). For example, as mentioned above, time-dependent (split) grouping may not be used with ~~timeconstraining~~ time constraint A or B. These functions may be performed by the time constraint logic 718 of FIG. 7.

Please replace the paragraph beginning at page 18, line 17, with the following amended paragraph:

Next, a table, such as the grouping values table 706 of FIG. 7, is filled with grouping values, if any, that have already been read and checked for consistency ~~(1106)~~(1108). The re-grouping engine calls the grouping reader 402 to read the grouping value(s) of the selected Infotype, and adds this grouping value to the table (1110). Then, by comparing the current assignment/Infotype with the entries in the table, any necessary repairs may be proposed (1112) and performed (1114).

Please replace the paragraph beginning at page 18, line 30, with the following amended paragraph:

The timeline 1202a includes a record 1214, a record 1216, and a record 1218, having values shown as "1," "2," and "3," respectively. Note that the record 1214 is shown in a separate timeline than the records 1216 and 1218, which may represent, for example, two subtypes of the same Infotype. Similarly, the timeline 1204a has records 1220, 1222, 1224, and 1226, which have values shown as "1," "5," "2," and "[[3]]4," respectively. It should be understood from FIG. 12A that the various timelines and records shown therein have been grouped by the grouping reader 402 and checked for consistency by the consistency checker 714.

Please replace the paragraph beginning at page 23, line 4, with the following amended paragraph:

Subsequently, data is inserted from the source assignment, so as to result in correctly re-grouped records (1418). Techniques for performing an insert operation are discussed in more detail below. In this context, however, it should be understood that if the insert for the record being considered would result in a gap, then (for time constraint 1), the insert operation may be delegated to the resolver [[718]]720.

Please replace the paragraph beginning at page 23, line 13, with the following amended paragraph:

Finally, the improperly-extended records stored previously (1416) are considered (1420). Specifically, records in which the begin data still matched a proposed repair begin date are disregarded. In such a situation, it may be assumed that, even though the records were improperly extended, they were subsequently overwritten during the copy process (1418). Any remaining stored records are assigned to the resolver [[718]]720.

Please replace the paragraph beginning at page 23, line 18, with the following amended paragraph:

FIG. 15 is a flowchart 1500 illustrating an insert process for inserting data records. In FIG. 15, the process assumes that grouping is current consistent (or calls the consistency checker 714 to be sure). The grouping values (1502) and time constraint (1504) of the record to be inserted are checked, and the admissibility of the grouping values is also checked (1506). Records subject to time constraint 1 are assigned to the resolver [[718]]720 (1508). Other records are split so as to avoid extensions that go beyond existing grouping value splits (1510).

Please replace the paragraph beginning at page 25, line 14, with following amended paragraph:

However, it may be the case that no such record 1822 exists. For example, perhaps the employee in question was assigned to an employer associated with the grouping value "A" of timeline 1802, but had not begun work. ~~[[in]]~~In this case, as shown in FIG. 16B, the record 1826 would be extended as a record 1834, while a record 1828 would be extended as a record 1836. The grouping values of the records 1834 and 1836 are adjusted (to "A") to reflect their new grouping status. However, it is not clear whether or how one of these records should be changed to reflect the other, and/or whether/how one of these records should be copied into the space left empty by the deletion of the record 1820.